AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

1. (previously presented) A wireless local area network adapted for use by users traveling on a mobile platform, the network comprising:

a network server located on the mobile platform; and

a plurality of network access points each independently associated with a specified cell area on the mobile platform, each being connected to the server, each network access point being accessible wirelessly by a predetermined number of user portable electronic devices per network access point over one of a plurality of wireless channels having non-overlapping frequencies; and

wherein each of the network access points is configured to wirelessly communicate with said portable electronic devices within an associated one of a plurality of cell areas on the mobile platform, and is further configured to communicate with said portable electronic devices that are roaming into a second one of said cell areas on the mobile platform from a first one of said cell areas on the mobile platform.

2. (previously presented) The wireless local area network of claim 1, wherein the network access points are spaced apart within an interior area of the platform.

3. (previously presented) The wireless local area network of claim 1, wherein at least one of the access points is configured so that a line replaceable unit of an aircraft system and an antenna of the access point are separated by a distance at which a field strength of the antenna is less than interference thresholds of the line replaceable unit.

4. (previously presented) The wireless local area network of claim 1, wherein each of the network access points comprises an antenna mounted in an overhead area of the mobile platform.

5. (previously presented) The wireless local area network of claim 1, wherein each of the network access points is configured to provide a wireless link only to portable electronics devices predetermined to meet predetermined standards for at least one of interference, health and safety.

6. (previously presented) The wireless local area network of claim 5, wherein each of the network access points is further configured to ignore any portable electronic devices not predetermined to meet the predetermined standards.

7. (cancelled)

8. (previously presented) The wireless local area network of claim 1, wherein each of the network access points is configured to transmit and receive signals using a spread-spectrum modulation method.

9. (previously presented) The wireless local area network of claim 8, wherein each of the network access points is configured to transmit and receive signals using direct sequence spread spectrum transmission.

10. (previously presented) The wireless local area network of claim 1, wherein each of the access points comprises an antenna configured to communicate over a channel not being used by an adjacent access point antenna.

11. (previously presented) The wireless local area network of claim 9, wherein at least one of the channels is assigned to more than one of the access points.

12. (previously presented) The wireless local area network of claim 1, wherein each of the access points transmits at a radiated power between 1 and 5 milliwatts.

13. (previously presented) The wireless local area network of claim 1, wherein each of the access points communicates with the portable electronic devices at frequencies at and above about 2.40 GHz.

14. (previously presented) The wireless local area network of claim 13, wherein each of the access points communicates with the portable electronic devices at between about 2.40 and 2.483 GHz.

15. (previously presented) The wireless local area network of claim 1, further comprising at least one antenna system configured to transmit to and receive data from a ground-based system.

16. (previously presented) A method for providing, to users on board a mobile platform, a wireless local area network operating at a given frequency band to connect users to a wide area network, the method comprising the steps of:

distributing use of a plurality of wireless channels in the frequency band to a plurality of network access points having antennas spaced apart within an interior area of the mobile platform, the distributing step performed such that no two adjacently positioned access point antennas use the same frequency; and

enabling wireless access to the wide area network, by a predetermined number of user portable electronic devices per access point when the portable electronic devices are within a given proximity to at least one of the access point antennas.

17. (previously presented) The method of claim 16, further comprising the step of allowing access to an access point only by a user portable device that meets predetermined standards for at least one of health, safety and electromagnetic interference.

18. (previously presented) The method of claim 16, further comprising the step of determining a cell size for each access point.

19. (previously presented) The method of claim 18, wherein the step of determining said cell size comprises the steps of:

determining an effective cell radius for an access point antenna; and

locating the access point antenna so that users of the access point antenna are within the cell radius relative to the access point antenna.

20. (previously presented) The method of claim 16, wherein the plurality of channels comprise non-overlapping channels.

21. (previously presented) The method of claim 20, wherein the non-overlapping channels comprise three channels.

22. (previously presented) The method of claim 16, wherein the step of distributing use of a plurality of channels comprises assigning a channel to more than one said access point.

23. – 25. (cancelled)

Please add the following new claims 26 and 27.

26 (New) A wireless local area network adapted for use by users traveling on a mobile platform, wherein the mobile platform has a plurality of rows of seats, the network comprising:

a network server located on the mobile platform;

a plurality of network access components each independently associated with a specified seating area on the mobile platform, each being in communication with the network server, and each network access component being accessible wirelessly by a predetermined number of portable electronic devices;

each of said network access components including an antenna;

at least first and second ones of the network access components further being located at spaced apart ones of said seat rows in the mobile platform; and

each of the network access components further being configured to wirelessly communicate via its associated said antenna with said portable electronic devices within an associated one of said seating areas on the mobile platform while enabling roaming of a given one of said electronic devices between said first and second ones of the network access components; and

a communication system for wirelessly linking said network server on said mobile platform with a subsystem disposed remotely from said mobile platform.

27 (New). A wireless local area network adapted for use by users traveling on a mobile platform, wherein the mobile platform has a plurality of rows of seats, the network comprising:

a network server located on the mobile platform;

a plurality of network access components each forming a network access point, and each being independently associated with a different, predetermined seating row on the mobile platform, and each being in communication with the network server;

each network access component being accessible wirelessly by at least one portable electronic device located in its associated said seating row;

each of said network access components including an antenna;

each of the network access components further being configured to wirelessly communicate via its associated said antenna with said portable electronic devices within an associated one of said seating rows on the mobile platform while enabling roaming of a given one of said electronic devices between said different ones of said network access components; and

a communication system for wirelessly communicating information between said network server on said mobile platform and a subsystem disposed remotely from said mobile platform, said communication system including a receive antenna and a transmit antenna.